

L 11047-65 EN(a)/EN(b)/EN(c) 44 44 44 45
ACC NO: AP0000672 UZ/0236/65/000/002/0111/0124

AUTHOR: Vaytnis, Ya.P.; Aleynikov, P.K.; Slinbis, V.A. 44

ORG: Institute of Chemistry and Chemical Technology AN LitSSR (Institut khimii i khimicheskoy tekhnologii AN LitSSR)

TITLE: Effect of heat treatment on some physical and mechanical properties and on the structure of silicate glasses. 542. Electrical properties

SOURCE: AN LitSSR. Trudy. Seriya B. Fiziko-matematicheskkiye, khimicheskkiye, geologicheskkiye i tekhnicheskkiye nauki, no.2, 1965, 111-124

TOPIC TAGS: silicate glass, glass property, solid mechanical property, zinc oxide, barium oxide, magnesium oxide, inorganic oxide

ABSTRACT: A study was made of the electrical properties of three-component sodium silicate glasses containing beryllium oxide, magnesium oxide, zinc oxide, strontium oxide, calcium oxide, and barium oxide, as well as ordinary window glass. Before measurement of electrical properties, the glass was subjected to heat treatment at 550, 650, and 800°C for 500 hours. For purposes of comparison, identical measurements were also made on glasses which had not been subjected to heat treatment. To exclude the effect of atmospheric moisture on the values of the electrical properties, the measurements were made at elevated temperatures. The first

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ACC NO: AP6000672

determination of electrical properties was made at 35000, with subsequent measurements at 300, 250, 200, 150, and when necessary, at 130 and 11000. Measurements were made of the specific resistance, the dielectric losses, and the dielectric constant. Experimental results, exhibited in tabular form, show that with an increase in temperature of heat treatment from room temperature to the transformation temperature there is an increase in the specific resistance and a decrease in the dielectric losses and in the dielectric constant. With an increase of heat treatment temperature above the transformation temperature, there is a decrease in the specific resistance and an increase in the dielectric losses and the dielectric constant. Orig. art. has: 5 figures and 2 tables.

SUB CODE: 11/07 SUBX DATE: 14Dec64/ ORIG REF: 009/ OTH REF: 002

PC
Card 2/2

11045-55 REP(1)/INT(1)/INT(1) 22
ACC NO: AP6000675 UR/0236/65/000/002/0125/0136
AUTHOR: Alexnikov, P.K.; Paulavichyus, R.B. 21
ORG: Institute of Chemistry and Chemical Technology AN LitSSSR (Insti- 23
tat khimii i khimicheskoy tekhnologii AN Lit SSR)
TITLE: Effect of heat treatment on some physical and mechanical prop-
erties and on the structure of silicate glasses. 1349. Structure
SOURCE: AN LitSSR. Trudy. Seriya B. Fiziko-matematicheskiye, khimiches-
kiye, geologicheskkiye i tekhnicheskkiye nauki, no.2, 1965, 125-136
TOPIC TAGS: silicate glass, crystal structure, glass property, berylli-
um compound, strontium compound, magnesium compound, zinc compound,
calcium compound
ABSTRACT: For the first time, a study by electron microscope methods was
made of the fine structure of glasses of the system $\text{Na}_2\text{O}-\text{RO}-5 \text{SiO}_2$ (where
RO represents beryllium oxide, magnesium oxide, calcium oxide, zinc ox-
ide, strontium oxide, cadmium oxide, and barium oxide) and window glass
as a function of the duration of heat treatment in the temperature in-
terval from 550 to 800°C. Time of the heat treatment experiments was 3,
6, 12, 50, and 500 hours. The fine structure of the glass was studied
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ACC No. AP6000675

by several methods--x-ray scattering at small angles, electron microscope, microscopic, and other methods. It was established that, with long-term heat treatment of the glasses, together with micro-nonhomogeneities of the order of 60-150 A, in glasses with a tendency toward crystallization there are formed aggregates and agglomerates which are the reason for the decreased strength of the glasses (bending strength, micro-breaking strength). Prolonged high temperature heat treatment of glasses which do not have a tendency toward crystallization increases their strength. During heat treatment of these glasses, there is no formation of particles, aggregates or agglomerations of significant size compared with the micro-nonhomogeneities but, on the other hand, there occurs a change in the dimensions of the micro-nonhomogeneities. Orig. art. has: 4 figures.

SUB CODE: 11,07 SUBM DATE: 26Sep64/ ORIG REF: 008/ OTH REF: 000

BC
Card 2/2

ZHITSEVICHYEN, I.I. [Zitkeviciute, I.]; MICHENOV, V.S.; FLEYNKOV, F.K.

Alkali resistance of some silicate glasses. Part 1: Dependence of alkali resistance on the composition of glasses. Trudy AN Lit. SSR. Ser. B. no.2:137-148 1965. (1965:19:5)

1. Institut khimii i khimicheskoy tekhnologii AN SSSR. Submitted October 6, 1964.

ZHITKOVICHVITE, I.I. [Titkeviute, I.]; ALENIKOV, P.K.;
SILYZIS, V.A. [Slizys, V.]

Alkali resistance of some silicate glasses. Part 2: Electron
microscope study of the glass surface desinterated by alkali.
Trudy AN Lit. SSR. Ser. B. no.2:149-166. '65. (MIRA 19:2)

I. Institut khimii i khimicheskoy tekhnologii AN Litovskoy SSR.
Submitted December 10, 1964.

1 104-65 DS(e)/EW(m)/DP(s)/DF(b) RM/WH

ACC No. 1P6000674 UR/0236/65/000/002/0167/0180

AUTHOR: Alaynikov, F.K.; Parfenov, V.A.

ORG: Institute of Chemistry and Chemical Technology AN LitSSSR
 (Institut khimii i khimicheskoy tekhnologii AN LitSSR)

TITLE: Effect of catalysts in the process of crystallization of various silicate glasses. 1. Effect of a platinum catalyst, in the system $Li_2O-MgO-SiO_2$

SOURCE: AN LitSSR. Trudy, Seriya B. Fiziko-matematicheskkiye, khimicheskkiye, geologicheskkiye i tekhnicheskkiye nauki, no.2, 1965, 167-180

TOPIC TAGS: silicate glass, catalysis, catalyzed crystallization

ABSTRACT: Glasses of the composition $12Li_2O-20MgO-80SiO_2-0.01Pt$ (parts by weight) and $12Li_2O-20MgO-80SiO_2$ were used to investigate the role of platinum in the crystallization process. Ultrathin sections were subjected to heat treatment in a conventional furnace rather than in the column of an electron microscope. In addition to direct electron microscopic examination of the crystallization process, the glasses were also subjected to thermographic and x-ray tests. It was established that the presence of platinum in glass aids liquefaction of the particles, from which the corresponding crystals crystallize out during heat treatment.

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I 18045-86
ACC NR AP500067A

It was also established that when the initial phase crystallizes out, the crystallization process does not stop, but there is a further aggregation of the individual crystals and of the residual mass of the vitreous crystalline material. Orig. art. has: 7 figures.

SUB CODE: 11, 07 SUBM DATE: 12Dec64/ ORIG REF: 005/ OTH REF: 002

BC
2/3

ZHITNAYICHYUVE, I.I. [Zitkeviciute, I.]; ALEKSEIKOV, F.K.

Alkali resistance of some silicate glasses. Part 3: Study of precipitates formed in the interaction of glass with caustic soda solution. Trudy AN Lit. SSR. Ser. B. no.4:87-95 '65 (MIRA 19:2)

1. Institut khimii i khimicheskoy tekhnologii AN Litovskoy SSR. Submitted April 29, 1965.

L 32167-66

ACC NR: AP6011323

and x-ray analysis. It was found that an increase in SiO_2 content in glass leads to increased thermal stability of the quartzlike phase. Low SiO_2 content is reflected in low content of the quartzlike phases. No quartzlike phase could be detected by x-ray analysis for glasses containing 41.35 wt % SiO_2 . Introduction of TiO_2 to glasses resulted in greater contents of quartzlike phases and in an extension of the lower limit of these phases to 800-850°C (while for TiO_2 -free glasses this lower limit was equal to 1000°C). Orig. art. has: 3 figures and 2 tables.

SUB CODE: 11,07/ SUBM DATE: 11Jun65/ ORIG REF: 003/ OTH REF: 009

Card 2/2

1 2172 66 100001/500(x) 2
 ACC-REF AP6008068 (A) SOURCE CODE: UR/0032/66/032/002/0207/0209

AUTHOR: Aleynikov, T. K. 33
B

ORG: Institute of Chemistry and Chemical Technology, Academy of Sciences Lithuanian SSR (Institut Khimii i khimicheskoy tekhnologii Akademii nauk Litovskoy SSR)

TITLE: Use of ultrathin sections for direct study of silicate materials under the electron microscope

SOURCE: Zavodskaya laboratoriya, v. 32, no. 2, 1966, 207-209

TOPIC TAGS: glass, silicate glass, electron microscopy, microtome

ABSTRACT: The author used the LKB-4800 ultramicrotome with diamond knives for preparation of ultrathin sections of glass and glass-crystal materials for direct study under the electron microscope. The sections were made from ground and polished right pyramids of glass with an angle between opposite faces of 60-90° and in certain cases from sharp fragments of glass fastened by glue or resin to a glass rod 4-6 mm in diameter. Sections 200-350 angstrom thick were photographed directly on the stage. Photomicrographs of various types of glass are given. Orig. art. has: 8 figures.

SUB CODE: 20,11/ SUBM DATE: 00/ ORIG REF: 004/ OTH REF: 000

UDC: 537.539.35

Cont 1/1 *200*

LUTSEVICH, P.A.; MONGALEV, G.F.; MIKHALEVICH, N.G.; ZINOVICH, K.F.;
SAPRONENKO, A.P.; KLIMENKOV, P.A.; GAYDUKEVICH, N.M.; SILIN,
M.S.; BRAZOVSKIY, P.V.; KOVPAK, M.D.; MELESHKEVICH, O.A.;
KAMENITSEVA, V.N.; KULIKOVSKIY, A.V.; TARAYKOVICH, P.I.;
ALEXNIKOV, G.A.; SHMULEVICH, Sh.S.; GRACHEVA, K.I.; NIKOLAYEVA,
Yu.N.; VOLOKHOV, M.A.; DOMASHEVICH, O., red.; KARLINA, E.,
red.; ZUYKOVA, V., tekhn. red.

[Manual for livestock raisers] Spravochnik shivotnovoda.
2., dop. i perer. izd. Minsk, Gos.izd-vo sel'khoz.lit-ry
BSSR, 1963. 462 p. (MIRA 16:8)

1. Glavnyy zootekhnik Upravleniya nauki Ministerstva sel'skogo
khoz'yaystva Belorusskoy SSR (for Safronenko).
(Stock and stockbreeding)

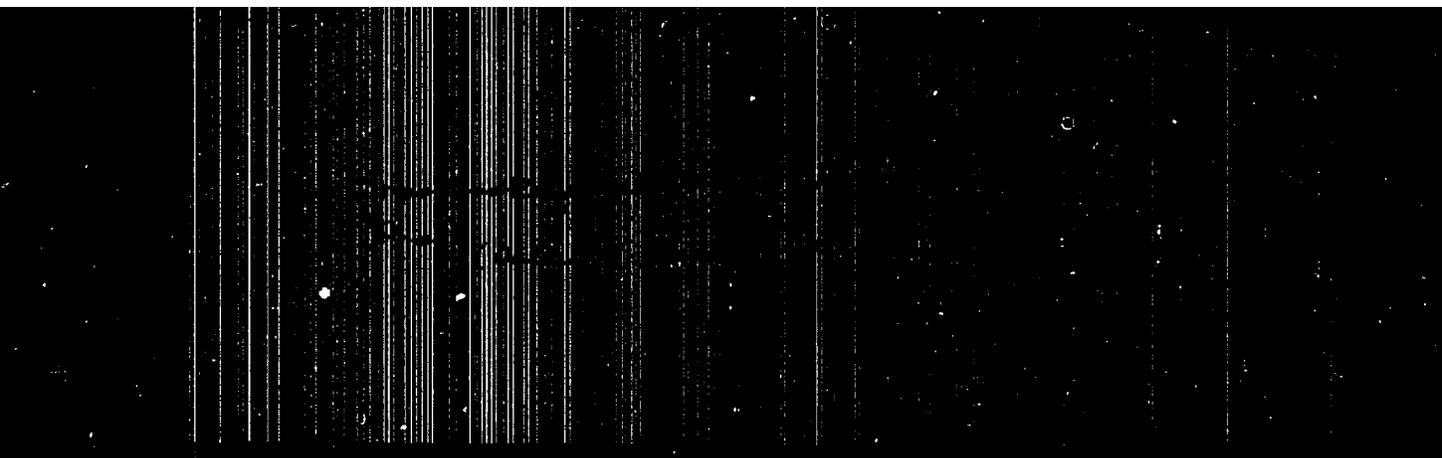
ALEYNIKOV G.I.

REZNIKOV, M.I., kandidat tekhnicheskikh nauk: ALEYNIKOV, G.I., inzhener.

Some data on the solubility of calcium sulfate in water at high
temperatures. Trudy MNI no.11:198-203 '53. (MLRA 7:11)
(Calcium sulfate) (Steam boilers)

"APPROVED FOR RELEASE: 09/24/2001

CIA-RDP86-00513R000101020014-2



APPROVED FOR RELEASE: 09/24/2001

CIA-RDP86-00513R000101020014-2"

"APPROVED FOR RELEASE: 09/24/2001

CIA-RDP86-00513R000101020014-2

APPROVED FOR RELEASE: 09/24/2001

CIA-RDP86-00513R000101020014-2"

ALEYNIKOV, G. I.

AID P - 4953

Subject : USSR/Engineering

Card 1/ Pub. 110-a - 2/21

Authors : Kostrikin, Yu. M., Yu. O. Novi, K. A. Rakov, Kandidats
of Tech. Sci., G. I. Aleynikov, N. V. Bulgakova, V. A.
Taratuta, Engineers.

Title : Results of thermal and chemical tests of a once-through
boiler of 215 and 300 atmospheres.

Periodical : Teploenergetika, 8, 10-13, Ag 1956

Abstract : Data are given on the quality of steam supplied by an
once-through boiler operating at 215 and 300 atmospheres.
The boiler is fed by the turbine condensate mixed with
the cooling calcium-bicarbonate water. The design and
performance of boilers of near critical and super
critical pressures are discussed, and various related
problems are examined. 4 diagrams. 3 references.

AID P - 4953

Teploenergetika, 8, 10-13, Ag 1956

Card 2/2 Pub. 110-a - 2/21

Institution : VTI (All-Union Heat Engineering Institute) and TsKTI
(Central Institute for Boilers and Turbines), Moscow
Branch.

Submitted : No date

ALEYNIKOV, G. I. Cand Tech Sci -- (diss) "Study of the physicochemical conditions of vapor purification in ^usilicic^gacid flux." Mos, 1957. 15 pp 20 cm. (Min of Higher Education USSR. Mos Order of Lenin Power Engineering Inst im V.M. Molotov), 100 copies (KI, 14- 57, 86)

-13-

Aleynikov - G.I.

USSR /Chemical Technology. Chemical Products
and Their Application
Water treatment. Sewage water.

H-5

Abs Jour: Referat Zhur - Khimiya, No 1, 1958, 1725

Author : Aleynikov G.I.

Title : Study of the Washing of Steam to Remove Silicic
Acid

Orig Pub: Teploenergetika, 1957, No 2, 12-16

Abstract: The effectiveness of washing of steam was
studied in a semi-industrial, high-pressure
flow unit. Rate of flow of the steam being
washed 900-1000 kg/hour, pressure 110-115 atmo-
spheres absolute, washing efficiency is the quan-
tity W : the ratio of the amount of SiO_2 re-
moved by washing to the total amount of SiO_2 in

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USSR Chemical Technology. Chemical Products
and Their Application
Water treatment. Sewage water.

H-5

Abs Jour: Referat Zhur - Khimiya, No 1, 1958, 1725

steam and water prior to separation. W
 $(1 - x) : [x/\beta_g + 1 - x]$, wherein $(1 - x)$
is moisture content of steam before entering the
separator; β_g -- ratio of silicon content of
washing water and dried steam. In the experiments
the length of the mixing chamber was 680 mm, velo-
city of the medium was 15-18 times greater than
the critical velocity of moisture stripping from
the film. In a portion of the experiments slightly
superheated steam was passed into the washing
apparatus, in other experiments it was moist
steam (spraying was absent). Experiments with
superheated steam showed that β_g increases at
first, with increase, in the blow-off water from

Card 2/4

USSR /Chemical Technology. Chemical Products
and Their Application
Water treatment. Sewage water.

H-5

Abs Jour: Referat Zhur - Khimiya, No 1, 1958, 1725

the separator, of the silicon-alkali ratio (SAR), i.e., of the correlation between equivalent concentrations of NaOH and SiO_2 . If SAR is greater than 2, β g becomes constant ≈ 120 . Increase of the moisture content of the steam, in the washing apparatus, from 2 to 6%, raises the multiplicity factor of steam purification from 3.5 to 8.4%. The experiments with moist steam yielded higher values of β g: with SAR ≈ 3 , β g = 140; with SAR = 5, β g = 160. Addition to the steam, prior to washing, of 386 and 651 mg/kg Cl^- , 366 and 722 mg/kg SO_4^{2-} , and 33.3 mg/kg NH_3 , did not affect the effectiveness of SiO_2 removal. A prerequisite of effective washing is a SAR within the range of 1-2, in the

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USSR /Chemical Technology. Chemical Products
and Their Application
Water treatment. Sewage water.

H-5

Abs Jour: Referat Zhur - Khimiya, No 1, 1958, 1725

blow-off water. Flow washing of steam is appli-
cable, in principle, also to drum boilers.

Card 4/4

"APPROVED FOR RELEASE: 09/24/2001

CIA-RDP86-00513R000101020014-2

APPROVED FOR RELEASE: 09/24/2001

CIA-RDP86-00513R000101020014-2"

S/114/60/000/010/009/011/XX
E194/E155

AUTHORS: Algynikov, G.I., Candidate of Technical Sciences, and
Lipatov, N.N., Candidate of Technical Sciences

TITLE: An investigation of the efficiency of centrifuging
in removing corrosion products from water

PERIODICAL: Energomashinostroyeniye, 1960, No.10, pp. 10-13

TEXT: It is important that the proportion of ferrous
corrosion products in feed water should be low. As it is not
always possible to prevent corrosion entirely, various methods have
been devised for removing the corrosion products from water.
Little information is available about the particle-size distribu-
tion in feed water and this makes it difficult to devise methods of
purification. It is accordingly necessary to study the particle-
size distribution of corrosion products in samples of water
contaminated with various metals under various operating conditions.
This article gives particle-size distribution characteristics of
water from power equipment. It includes two main characteristics:
the number of particles of corrosion products per unit volume of
water, and the shape and size of the particles. To determine the

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An investigation of the efficiency... S/114/60/000/010/009/011/XX
E194/E155

number of disperse particles in water the microscope technique with special counting chambers was employed, and in particular the Goryayev counting chamber well-known in medical and biological practice was used. The work was done on return condensate from two Moscow TETs (Heat and Electric (District Heating) Power Stations), on water used to feed the experimental installations in the Kotel'naya laboratoriya MO TsKTI (Boiler-house laboratory of the Moscow Division of the Central Boiler and Turbine Institute), and on return condensate obtained from various industries (engineering, chemical and food). The pH value of the waters ranged from 6 to 7.5 and the range of salt content was wide. Iron was determined colorimetrically. Particle number counts are given in Table 1, in which the first line states the iron content mg/kg (ppm); the second line the number of particles; the third line the number of particles in 1 mg of iron. The shape, size and number of iron particles in water were also determined by microscope methods including mass microphotography. The main investigations were made with a magnification of 1350 and a scale unit on the ocular micrometer of 1.3 microns. All particles of less than half a scale unit were classed in the first group, those of half a scale unit
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An investigation of the efficiency... S/114/60/000/010/009/011/XX
E194/E155

in the second group, and so on. The main results of the particle-size distribution study are given in Table 2. It will be seen that in all the samples the majority of particles have a maximum dimension of up to 1.3 microns. Particles of this size and below comprise from 65 to 80% of the total number of particles. The particles are usually in the form of plates, and the ratio of the maximum dimension to the minimum ranges up to 3:1. Because of the small particle size centrifugal purification requires the use of super centrifuges. The tests were made with a tubular type centrifuge with a rotor diameter of 43 mm, 190 mm high, running at 20 000 r.p.m. with a rated throughput of 10 kg/hour. The efficiency of filtration was assessed in terms of the ratio of the iron content of the purified water to that of the unpurified. The results show that with the centrifuge operating near its nominal rating the extraction of iron is practically complete but that the degree of extraction falls off as the throughput is increased. To study this question the clarifier drum of the centrifuge was lined with paper and after stable running had been achieved a quantity of water contaminated with iron was passed through the centrifuge. The graph of Fig.3 shows the distribution of deposits
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An investigation of the efficiency... S/114/60/000/010/009/011/XX
E194/E155

over the height of the tube as a function of the throughput; the percentage of deposit being plotted on the y axis and the height of the centrifuge on the x axis; the throughput is denoted by the figures on the curves, kg/hour. It will be seen that as the throughput is increased the slope of the deposit increment curve alters because the water is not completely purified. At the rated throughput of 10-12 kg/hour the amount of deposit on the top sections of the tube is small, but it increases at higher throughputs. Two tests were made on condensate from a Moscow Heat and Electric (District Heating) Power Station where all the condensate passes through a mechanical filter charged with sulpho-carbon. Before purification the condensate contained 0.2-0.3 ppm iron, after mechanical filtration the iron content became 0.04-0.06 ppm, and after centrifuging it was not greater than 0.01-0.02 ppm. Similar results were obtained with plate-type super-centrifuges, in which the best purification was obtained on low-output separators with a gap between plates of 0.3 mm. The tests have demonstrated the possibility of removing nearly all the ferrous corrosion products from water. There are 3 figures, 3 tables and 6 Soviet references.

Card 4/ 8

ALEYNIKOV, G.I., kand. tekhn. nauk; ZENKEVICH, Yu.V., kand. tekhn. nauk;
GUREVICH, S.A., inzh.; KOKOSHKIN, I.A., inzh.

Results of thermochemical tests of the PK-12 boiler and of
observations on the water system of super-high parameter units
under operating conditions. Energomashinostroenie 7 no.3:1-6
Mr '61. (MIRA 16:8)

(Boilers--Testing)

MAJET, A.F., doktor tekhn. nauk, prof.; ALEYNIKOV, G.I., kand. tekhn.
nauk; TARATUTA, V.A., inzh.

Restart cleaning of an 800MW power block. Teploenergetika
no. 7:24-33 JI '65. (MIA 18:7)

I. Moskovskoye otdeleniye Tsentral'nogo kotleturnogo in-
stitutu im. Polzunova.

USSR / Farm Animals. Cattle. 2

Abs Jour: Ref Zhur-Biol., No 9, 1958, 40413.

Author : Popov A. M., Aleynikov G. S.

Inst : Not given.

Title : The Effect of The Frequency of Milking on the Performance of Cows.

Orig Pub: Sb. tr. In-ta zootekhn. i zoologiiyeny. AN LatvSSR, 1956, 8, 53-62.

Abstract: At the sovkhos "Yelgavskiy" and at the kolkhoz "Lachpleisis", experiments were conducted as to the effect of the twofold and threefold milking of cows of the Brown Latvian breed upon their milk production. With the milk yield averaging 8-10 liters per 24 hours, the switching of cows from threefold to twofold milking produced

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USSR / Farm Animals. Cattle.

Abs Jour: Ref Zhur-Biol., No 9, 1958, 40413.

Abstract: but a transitory decrease of the milk yield (on the 4th day of experimentation the milk yield was completely restored). The fat content of the milk did not change. The authors consider that the switching of cows in the kolkhozes of the Latvian SSR from threefold to twofold milking is economically expedient.

Card 2/2

8

A L E Y N . K O U , M . S .

Actual'di, E. Ya. Doctor of
Biological Sciences 807/70-54-1-46/60

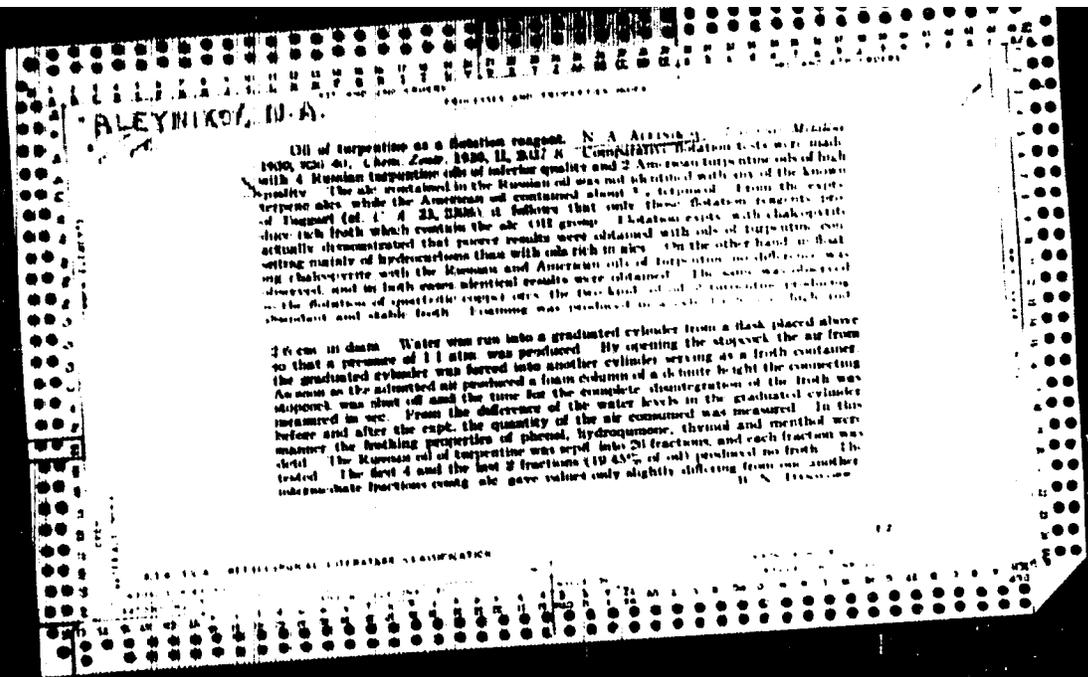
TITLE: Problems of Soil Zoology (Problems pochvovoy zoologii)

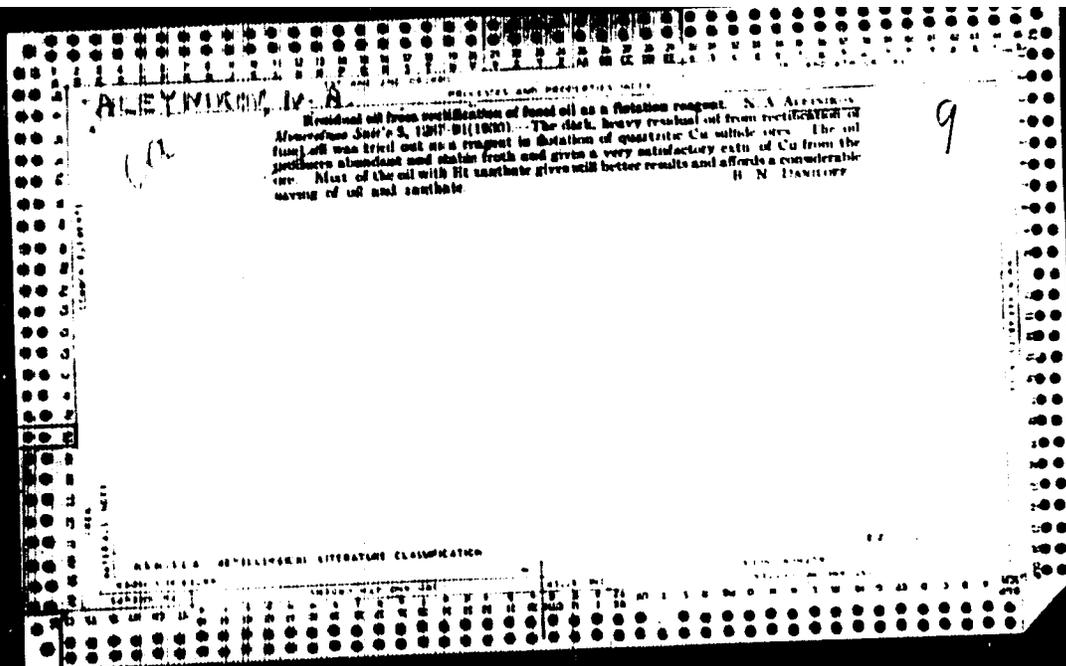
PERIODICAL: Vestnik Akademii nauk SSSR, 1979, Nr 1, pp 104-105 (USSR)

ABSTRACT: The 1st All-Union Conference on these problems took place in Moscow from November 25 to 29, 1978. It was attended by representatives of the Ukrainian SSR, the Baltic and Central Asiatic Republics, especially from Uzbekistan, altogether 175 persons. From the many lectures which were heard the author briefly mentions the following:
 N. S. Giljarov spoke of basic research problems of the zoology of invertebrates and the tasks of soil zoology.
 A. I. Kravchenko, V. E. Kuznetsov, M. A. Zhuravleva and I. A. Kiseleva reported on problems of soil productivity in connection with the activity of invertebrates and their soil-forming role.
 I. A. Malozemskiy reported on the investigation of earth worms.
 M. M. Aleksandrov, Kazanskii filial Akademii nauk SSSR (Leningrad) Institute of Zoology of Sciences, USSR) reported on the soil fauna of the Far East.
 V. S. Pilyavskiy (Ivanovo) characterized the soil fauna of arable soils.
 V. I. Kravchenko (Ilyev) reported on the soil-forming role played by earthworms in forests.
 P. V. Kuznetsov (Moscow) reported on the variability of the soil fauna inhabiting the soil in connection with different conditions of life.
 Yu. S. Pilyavskiy, N. P. Kravchenko, S. F. Kuznetsov, S. E. Shabanov, L. M. Buzmina, I. V. Pilyavskiy - laboratoriya pochvovoy zoologii Institutov zoologii i fiziologii im. A. N. Severtsova Akademii nauk SSSR (Laboratory of Soil Zoology of the Institute of Animal Morphology named A. N. Severtsov of the AS USSR) delivered 6 reports, which were followed by reports of young zoologists from Moscow under the scientific supervision of N. S. Giljarov. On this conference the existence of soil zoology as an independent and important subject was demonstrated and the necessity of its integration into the number of problems coordinated by the AS USSR was emphasized. The next conference on soil zoology will probably be held in Ilyev in 1981.

Card 1/2

(14)





ALEY NIKOL, N. A.

C. Q.

1981

General and Physical Chemistry
2

Formation and properties of flotation dispersion systems
 N. A. Alekseyev (I. V. Stalin Moscow Mining Inst.)
 ZHURNAL Prikladnoi Khimii, (J. Applied Chem.) 23, 812-22
 (1950).--The mineralized froths formed by dispersion of air
 in coarse aq. suspensions of coal can be classified on the basis
 of 2 types: (1) film structure and (2) aggregate structure.
 The aggregate froths are easily formed in the presence of
 emulsions of oil and hydrocarbons as a result of disruption
 of the film structure of film froth as a result of processes of
 flocculation. The type of froth can be detd. by the content
 of water in the dispersion, products and by the nature of this
 dispersion. In the aggregate froths the water content for det-
 ailed granulometric compns. of the coal changes in the
 limits 40-60%, and does not depend on the amt. of flotation
 reagent added to the pulp (125-7000 g./ton). It was
 learned that the phys. condition of the air bubble in the dis-
 persed medium should be considered as the condition of the
 system, including bubble, adsorption layer, and their sur-
 rounding solvent films. On the basis of the max. vol. of
 froth formed, the following relations detg. the depth of the
 film and the dia. of the gas bubble were proposed: $h =$
 $(\sigma - 1) r$; $\Delta P = 2\sigma / 2r - 1) r$, where h is thickness of film, r
 is radius of froth cell, σ is max. vol. of froth formed, P is
 pressure of gas inside the froth cell, and σ is surface tension
 of the medium.

(Nadya S. Macy)

12

ALMYINOV, N.A.; PRESICH, D.F.

Industrial use of flotation reagents in apatite flotation
from apatite-nepheline ores. Obog. rud. 2 no.4:32-37 '57.

(MIRA 11:8)

(Flotation) (Apatite)

5(4)
AUTHORS: Aleynikov, N. A., Makarova, A. M. SOV/20-124-4-34/67

TITLE: The Formation and Properties of Metallic Soaps in Diluted Aqueous Solutions (Obrazovaniye i svoystva metallicheeskikh myl v razbavlennykh vodnykh rastvorakh)

PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 124, Nr 4, pp 852-854 (USSR)

ABSTRACT: Reference is first made to several earlier papers dealing with this subject. The production of metallic soaps of the polyvalent cations may be represented as a function of the pH-value of the aqueous solutions as the process of the simultaneous formation of "acid" and "basic" soaps. The acid soaps are formed in the case of a low degree of hydrolytic decay of the salt of the polyvalent cation; their composition varies with decreasing pH-value of soaps with complete stoichiometrical substitution up to their molecular decay by way of soaps in which there are different degrees of penetration of H⁺ into their mycelium or polymeric complexes. Here it is possible to assume, besides an ion-exchange, also a molecular mechanism, which is connected with the adsorption of palmitic acid on the mycelium of the "basic"

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SOV/20-124-4-34/67
The Formation and Properties of Metallic Soaps in Diluted Aqueous Solutions

soaps with following chemical conversion. The hydrolytically formed basic salts (among them also the complex cations) form slightly "basic" soaps; their composition varies with increasing pH-value of chemically incomplete compounds (with respect to substitution by palmitic acid) up to chemo-sorption-like compounds of the basic soap with different degrees of adsorption of OH. For the purpose of confirming the general scheme of the metal soaps Fe^{2+} - and Fe^{3+} -palmitates were produced. The manner in which the soaps are formed from the reacting solutions is able to model the processes occurring in the presence of these soaps. In the case under investigation it was important to add a solution of sodium palmitate with different content of free NaOH to the solution of the iron salt sulfate with different content of free H_2SO_4 . The theoretical-ly determined general character of the dependence of the composition of the soaps on the pH-value agrees satisfactorily with experimental values. The stability of the "basic" soaps increases with increasing pH-value, and at pH-values of 10-11 a highly stable sol is formed. The authors thank Academician P. A. Rebinder and A. B. Taubman for their interest in this work and for valuable advice. There are 1 figure and 6 ref-

Card 2/3

The Formation and Properties of Metallic Soaps in Diluted Aqueous Solutions

SOV/20-124-4-34/67

ferences, 5 of which are Soviet.

ASSOCIATION: Kol'skiy filial im. S. M. Kirova Akademii nauk SSSR
(Kola Branch imeni S. M. Kirov of the Academy of Sciences,
USSR)

PRESENTED: October 6, 1958, by P. A. Rebinder, Academician

SUBMITTED: September 30, 1958

Card 3/3

ALYNIKOV, N.A.; USACHEV, P.A.; GOLOVANOV, G.A.

Flotation of iron oxides by synthetic carboxyl acids. Gor.zhur.
no.9:60-63 S '60. (MIRA 13:9)

1. Kol'skiy filial AN SSSR (for Alynikov, Usachev).
2. Olenegorskoye rudoupravleniye (for Golovanov).
(Iron ore) (Flotation--Equipment and supplies)

S/065/61/000/001/008/008
E030/E212

AUTHORS: ~~Ale. nikov, N. A.~~ and Afanas'yeva, N. V.
TITLE: Analysis of High Molecular Weight Oxidates and
their Flotation Properties
PERIODICAL: Khimiya i tekhnologiya topliv i masel, 1961, No. 1,
pp. 61-67

TEXT: Various petrolata, which are oxidized for use as
flotation agents, have been extensively analyzed. The petrolata
were in the 450-750 molecular weight region, and three were
oxidized by the low temperature Afanas'yeva process and the fourth
by the low temperature process at Ordzhonikidze/Baku. They are
used for extraction of low-sulphide ores, such as apatite,
ilmenite, zircon, cassiterite, etc. by flotation. The normal
specifications of flotation agents, by saponification value and
acid value, were found to be quite inadequate to predict their
separation efficiency, as determined with apatite ores. The acids
should be split up into oxy-acids, and carbonic acids. When the
concentration of the former rises, increasing amounts of foam are
formed, entraining air, and reducing the separation efficiency, so
that their concentration should be kept below about 13%. To
Card 1/2

S/065/61/000/001/008/008
E030/E212

Analysis of High Molecular Weight Oxidates and their Flotation
Properties

maintain acidity, the carbonic acid percentage must therefore not fall below about 33. Separation efficiencies of about 90% can then be obtained with apatite, at additive concentrations around 1 kg/ton of ore. Highest efficiency (96.0% at 800 gm/ton ore) is obtained with petrolata subjected to high temperature oxidation. There are 4 tables and 15 Soviet references.

ASSOCIATION: Kol'skiy filial AN SSSR
(Kola Branch of AS USSR)

Card 2/2

ALEYNIKOV, N.A.; GORBUNOV, N.A.; ALEYNIKOVA, N.S.

Using oxyethylated carboxylic acids in the flotation of non-sulfide ores. *Biul.tekh.-ekon.inform.* no.2:5-7 '62.

(MIRA 15:3)

(Flotation)

ALBYNIKOV, N.A.; GOLOVANOV, G.A.; USACHOV, P.A.; TOCHILIN, M.S.;
PITSYN, Yu.V.

Winning high-iron magnetite-hematite concentrates. *Biul.tekh.-
ekon.inform.Gos.nauch.-issl.inst.nauch.i tekh.inform.* no.5:11-13
'62. (MIRA 15:7)

(Iron—Metallurgy)

ALEYNIKOV, N.A.

Flotation of apatite with synthetic carboxylic acids. Obogrud.
7 no.1:14-20 '62. (MIRA 15:3)

1. Kol'skiy filial AN SSSR.
(Apatite) (Flotation)

ALBERTS, M.A.; SHARINOVA, T.P.; MUKHOMEDOV, G.I.; OGIRIN, YU.N.;
ZEMENOV, A.D.

Flotation properties of monocarboxylic acids of the $C_nH_{2n+1}COOH$ series of the $C_{11} - C_{17}$ composition. Zhur. prikl. khim. 35 no. 5: 1108-1115 (1962). (MIRA 15:5)

1. Vsesoyuznyy Nauchno-Issledovatskiy Institut Organicheskoy Khimii
Imeni N.D. Zelinskogo AN SSSR.

(Acids, Organic)
(Flotation)

ALEYNIKOV, N.A.; NIKISHIN, G.I.; OGIBIN, Yu.N.; PETROV, A.D.

Surface-active properties of branched aliphatic acids.
Neftekhimia 1 no.3:418-426 My-Je '61. (MIRA 16:11)

L. Kol'skiy filial AN SSSR i Institut organicheskoy khimii
AN SSSR imeni N.D. Zelinskogo.

ALEYNIKOV, N.A.; KRISTYANOV, B. Ye.

Synthesis of flotation reagents based on carboxylic acids.
Khim. pron. no. 10:747-750 O '63. (MIRA 17:6)

L. Kol'skiy Filial AN BSSR.

L 02139-67 ENT(m)/ENP(j) RM

ACC NR: AP6035962

SOURCE CODE: UR/OC62/66/000/004/0700/0707

AUTHOR: Galbin, Yu. B., Chistyakov, B. Ye., Alayrkhov, P. A., and Nikishin, G. I. 32
31
B

ORG: Institute of Organic Chemistry in P. D. Zolotarevskiy, AN SSSR (Institut organicheskoy khimii AN SSSR); Vol'skiy section, AN SSSR (Kol'skiy filial AN SSSR)

"Synthesis of Carboxylic Acids Containing Cycloalkyl and Phenyl Groups, by Free Radical Addition Reaction"

Moscow, Izvestiya Akademii Nauk SSSR, Seriya Khimicheskaya, No 4, 1966, pp 700-707

Abstract: This work is devoted to the study of the synthesis and flotation properties of carboxylic acids. Newly obtained data mainly concern the question of the effect of the structural characteristics of unsaturated hydrocarbons on their capacities to yield addition products in 1:1 ratio with carboxylic acids. The reactions were conducted at atmospheric pressure in the presence of ter-butyl peroxide. Reaction conditions, ratios of reagents and peroxide, 1:1 adduct yields, yields of the higher boiling substances (residues), and the adduct properties are presented. The radical addition reaction of carboxylic acids to omega-phenylalkenes-1 is accompanied by "benzyl cleavage" of the kinetic chain resulting in 1:1 adducts with a lower yield than

Card 1/2

L 02139-67

ACC NR: AF6035962

with the use of 1-alkenes. In contrast to 1-alkenes cycloal-
kenes and alkenes with no terminal double bonds have a lower
reaction capability in carboxylic acid addition reactions. This
is chiefly determined by spatial factors. Laboratory worker G. E.
Kondrashina took part in the carrying out of the experiment. Orig. art. has: 2
copies. (SPRS: 37,177)

TOPIC TAGS: free radical, carboxylic acid, organic synthetic process

SUB CODE: 07 / SUBM DATE: 06 Dec 63 / ORIG REF: 011 / OTH REF: 005

Card 2/2 *hh*

UDC: 547.398 + 542.91 + 541.51

ALEYNIKOV, G. M.

Problems of wages and preparation of work norms in sugar plants.
Sakh. prom. 32 no. 4:51 Ap '58. (MIRA 11:6)

1. Krasnoyarskiy sakharnyy zavod.
(Sugar industry--Production standards) (Wages)

SPASSKIY, A.O.; FOMIN, B.A.; ALMYHIKOV, S.A.

Thermal treatment of liquid metals and its effect on the
mechanical properties of castings. Izv.vys.ucheb.sov.; tsvet.
met. 2 no.6:162-165 '59. (MIRA 13:4)

1. Krasnoyarskiy institut tsvetnykh metallov, kafedra
litseynogo proizvodstva.

(Nonferrous alloys--Metallography)
(Metals, Effect of temperature on)

ALEYNIKOV, S.M., mladshiy nauchnyy sotrudnik

Determination of the thermophysical constants of hydraulic concrete
and reinforced concrete. Izv.VNIIG 64:243-249 '60. (MIRA 14:5)
(Thermal properties)

YESTIFNIEV, A.M., prof.; PEKHOVICH, A.I., starshiy nauchnyy sotrudnik,
kand. tekhn. nauk; ALEYNIKOV, S.M., mladshiy nauchnyy sotrudnik

Blackening the surface of ice: a method of speeding the spring
ice thaw. Izv. VNIIG 65:139-147 '60. (MIRA 14:5)
(Ice on rivers, lakes, etc.) (Thawing)

FON YEV, Vasilii Stepanovich; ALEYNIKOV, S.M., red.

[Vortex funnels and their use in electric power plants]
Vikhrevye voronki i ikh primeneniye na elektrostantsiyakh.
Moskva, Izd-vo "Energia," 1964. 183 p. (MIRA 17:6)

ALCZNIKOV, V.

Strengthening the material base. Soc. Sci. 1965. 9:10 S 165.

(MIRA 18:10)

1. Predsedatel' komiteta narodnogo organizatsii Vsesoyuznogo
dobrovol'nogo obrabotatstva desyatisy armii, aviatcii i flotu
SSSR Moskovskogo Iokovatsionnogo zavoda

ALFYNIKOVA, T. P.

Course of the disease and the outcome of treating cancer of the corpus uteri depending on the degree of myometrial proliferation. Akush. i gin. 38 no.3:65-70 My-Je '62. (MIRA 15 :6)

1. In kafedry onkologii (zav. - devstvitel'nyy chlen AMN SSSR zasluzhennyy deyatel' nauk i prof. A. I. Savitskiy) Tsentral'nogo instituta usovershenstvovaniya vrachey (dir. M. D. Kovrigina) i ginekologicheskogo otdeleniya (zav. - prof. L. A. Novikova) Gosudarstvennogo onkologicheskogo instituta imeni P. A. Gertsena (dir. - prof. A. I. Novikov)

(UTERUS—CANCER)

ALYNIKOV, Y.S., kandidat meditsinskikh nauk

A new type of portable stretcher. Khirurgia 32 no.11:81-82 N '56.
(MIRA 10:3)

1. Iz kafedry obshchey khirurgii (sav. - prof. A.A.Ocherel'yev)
Gor'kovskogo meditsinskogo instituta imeni S.M.Kirova.
(APPARATUS AND INSTRUMENTS
new type of portable stretcher)

ALEYNIKOV, V.S., kand.med.nauk (Gor'kiy, ul.Dzerzhinskogo, d.29, kv.11)

A litter not requiring manual lifting of the patient. Vest.khir.
80 no.4:141-144 Ap'58 (MIRA 11:5)

1. Iz kafedry obshchey khirurgii (i.o. sav. - dotsent A.I.
Konhevnikov) Gor'kovskogo meditsinskogo instituta.
(MURSHO GARR,

litter without manual lifting of patient (Rus))

ALBYNIKOV, V.S., kand.med.nauk

Dismountable apparatus for repositioning fragments in fracture of
the humerus. Ortop.trava. i protes. 20 no.1:67-69 Ja '59.

(MIRA 12:3)

1. In kafedry obshchey khirurgii (sav. - prof. A.I. Koshevnikov)
Gor'kovskogo meditsinskogo instituta (dir. - dots.N.N. Misinov).
(HUMERUS, fract.

appar. for repositioning fragments (Rus))

ALBYNIKOV, V.S., kandi.med.nauk

Apparatus for repositioning fractures of bones of the forearm.
Ortop.travm. i protez. 20 no.3:62-64 Mr '59. (MIRA 12:6)

1. In kafedry obshchey khirurgii (sav. - prof.A.I.Kozhevnikov)
Dor'kovskogo meditsinskogo instituta (dir. - dotsent N.N.Misi-
nov).

(ORTHOPEDICS, appar. & instruments
appar. for repositioning fract. of bones of
forearm (Rus))

ALEKSEYNIKOV, V.S., kand.med.nauk (Gor'kiy, ul. Dzerzhinskogo, d.29, kv.11)

Extension transport splint for the leg. Ortop., trava.i protes.
no.4:67-69 '62. (MIRA 15:5)

1. Iz kliniki obshchey khirurgii (sav. - prof. A.I. Kozhevnikov)
Gor'kovskogo meditsinskogo instituta (rektor - dotsent I.F.
Matyushin).

(SPLINTS (SURGERY))

ALPHABET, V.S.

Portable extra-ordinary spirit for working and... . 1991.
www. ...

ALEYNIKOV, V.S., kand. med. nauk (Gor'kiy 5, ul. Dzerzhinskogo, d.29,
kv.11,

Transport splint for the leg. Ortop., travm. i protez. 25 no.8:65-68
Ag '64. (MIRA 18:4)

1. In kliniki obshchey khirurgii (sav. - prof. A.I.Kozhevnikov) Gor'kov-
skogo meditsinskogo instituta (rektor - dotsent I.F.Matyushin).

ALEYNIKOV, V.S., kand. med. nauk (Gor'kiy 5, ul. Dzerzhinskogo d. 29, kv.11)

Clamp for skeletal traction using the olecranon. Ortop., travm. i
protez. 25 no.9:70-72 S '64. (MIRA 18:4)

1. In kliniki obshchey khirurgii (zav. - prof. A.I.Kozhevnikov)
Gor'kovskogo meditsinskogo instituta (rektor - dotsent I.F.Matyushin).

MOSKALENKO, S.I.; GABOVICH, M.S.; BACHINSKIY, Yu.V.; TOMILIN, A.V.;
MOHVEDOV, P.M.; LOMANOVA, M.N.; GOLOVEDV, P.D.; GAYDUKOV, G.I.;
-AJMNIKOV, Y.V.; SPENIN, M.D.; MIROMOVA, V.V.; BELAVITSIYA,
Ye.S.; TSVETSINSKIY, S.M.; MOCHUPURNYY, P.; KOBZAR', M.K.;
KIZIMOVA, Ye.S.; PRENYINSKIY, V.N.; GORDNYCHUK, V.K.; SEMERIGO,
V.F.; KISLYUK, N.

Fifty years in the sugar industry. Sakh.pron. 33 no.2:18
P '59. (MIRA 12:3)
(Shtapan, Georgii Viacheslavovich, 1888-)

АЛЕХНИКОВ, Я. В.

Employees of the Kalinin Factory will fulfill their obligations.
Sakh. prom. 33 no.1:11-12 Ja '59. (MIRA 12:10)

1. Sakharov saved Ineni Kalinina.
(Kursk Province--Sugar industry)

ALEYNIKOVA, A.F.

NECHERENKO, A.V.; BORZENKO, A.A.; ALEYNIKOVA, A.F.

Investigation of milk and milk products for Brucella. Zhur. mikrobiol.
epid. i immun. no.1:103-107 Ja '55. (MIRA 8:2)

1. In Usbekskey respublikanskoy protivobrutselloznoy stantsii
(glavnyy vrach M.I. Bashaeva, konsul'tant prof. P.F. Samsonov)
(BRUCELLA,
in milk & milk prod., determ.)
(MILK, bacteriology,
Brucella, determ.)

Translation M-1068, 13 Apr 56

"APPROVED FOR RELEASE: 09/24/2001

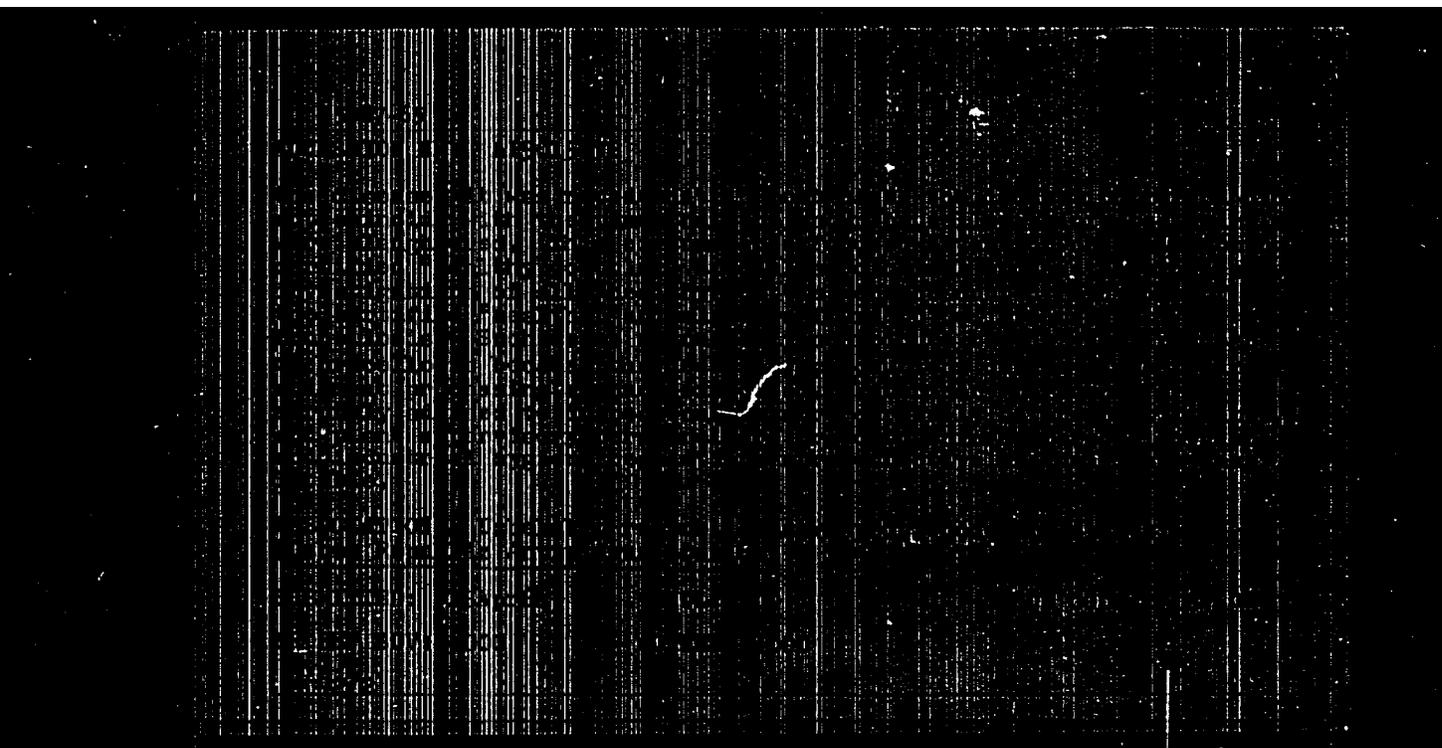
CIA-RDP86-00513R000101020014-2

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CIA-RDP86-00513R000101020014-2"

U 22449-66	ENT(1)/T	JK	
ACC NR. AP0019111	SOURCE CODE: UR/0016/65/000/011/0006/0009		
AUTHOR: <u>Mukhammadov, S. M.; Chirchikova, Z. M.; Alaynikova, A. T.</u>			
ORG: <u>Fabel Institute of Regional Medicine, AMN SSSR (Uzbekskiy institut krayevoy meditsiny AMN SSSR); Uzbek Republic Sanitary-Epidemiological Station (Uzbekskaya respublikanskaya sanitarno-epidemiologicheskaya stantsiya)</u>			
TITLE: Characteristics of <u>Brucella</u> strains isolated from humans and animals in Uzbekistan			
SOURCE: Zhurnal mikrobiologii, epidemiologii i immunobiologii, no. 11, 1965, 6-9			
TOPIC TAGS: brucellosis, bacteria, bacteriology			
ABSTRACT: Study of Brucella cultures isolated from cattle, sheep, and goats and from humans showed that 100 out of 161 were typical representatives of Br. melitensis (62.1%) while 31 were typical Br. abortus (19.1%). Atypical properties were noted in 19 cultures of Br. melitensis (11.1%) while 11 cultures were typed Br. abortus (6.7%). The Br. melitensis strains isolated from the sheep and goats were generally typical representatives of this species of Brucella. Of the cultures isolated from cattle, 14.6% of the Br. melitensis strains and 13.0% of the Br. abortus strains were atypical. Among the Br. melitensis cultures isolated from tick people, 11.2% were atypical. These were obtained from individuals handling cattle on farms where brucellosis was prevalent. Orig. art. has: 2 tables. <u>[FIS]</u>			
SUB CODE: 06/ Card 1/1	SUBM DATE: 16June/	ORIG REF: 006/ UDC: 576.851.42.01 (575.1)	

MUKHAMMADOV, B.M.; CHICHENINA, Z.M.; AIBYNIKOVA, A.P.

Characteristics of Brucella strains isolated from humans and animals in Uzbekistan. Zhur. mikrobiol., epid. i immun. 42 no.11: 6-9 # 165. (MIRA 18:12)

1. Uzbekskiy institut krayevoy meditsiny AMN SSSR i Usbekskaaya respublikanskaya sanitarno-epidemiologicheskaya stantsiya. Submitted June 16, 1964.

VINKOROV, V.A.; ALEYNIKOVA, F.A.

Activity of the Printing Industry Section of the Technical and
Economic Committee of the Leningrad Economic Council. Biul.-
tekhn.-ekon.inform. no.2:85-86 '62. (MIRA 15:3)
(Leningrad--Printing industry)

SMIRNOV, A.I., kand.tekhn.nauk; PETROVA, V.N., inzh.; SKVORTSOV, O.S.
kand.tekhn.nauk; Prinsipialni uchastiye: VINOGRADOVA, Ye.I.,
inzh.; ALEYNIKOVA, G.S., inzh.; KOSHINA, A.V., tekhnik;
PETUSHKINA, I.K., inzh., red.

[Efficient kinds of track structures of narrow-gauge railroads
(750 mm.gauge).] Ratsional'nye tipy verkhneso stroeniia puti
zheleznykh dorog (koli 750mm). Moskva, Izd-vo "Transport,"
1964. 148 p. (Moscow. Vsesoyuznyy nauchno-issledovatel'skiy
institut zheleznodorozhnogo transporta. Trudy, vol. 271)
(MIRA 17:5)

ALEYNIKOVA, I. N.

PHASE I BOOK EXPLOITATION

SOV/5590

Konferentsiya po poverkhnostnym silam. Moscow, 1960.

Issledovaniya v oblasti poverkhnostnykh sil; sbornik dokladov na konferentsii po poverkhnostnym silam, aprel' 1960 g. (Studies in the Field of Surface Forces; Collection of Reports of the Conference on Surface Forces, Held in April 1960) Moscow, Izd-vo AN SSSR, 1961. 231 p. Errata printed on the inside of back cover. 2500 copies printed.

Sponsoring Agency: Institut fizicheskoy khimii Akademii nauk SSSR.

Resp. Ed.: B. V. Deryagin, Corresponding Member, Academy of Sciences USSR; Editorial Board: N. N. Zakhavayeva, N. A. Krotova, M. M. Kuzakov, S. V. Nerpin, P. S. Prokhorov, M. V. Talayev and G. I. Pukh; Ed. of Publishing House: A. L. Bankvitsler; Tech. Ed.: Yu. V. Rykina.

PURPOSE: This book is intended for physical chemists.

Card 1/8

Studies in the Field of Surface Forces (Cont.)

SOV/5590

42
COVERAGE: This is a collection of 25 articles in physical chemistry on problems of surface phenomena investigated at or in association with the Laboratory of Surface Phenomena of the Institute of Physical Chemistry of the Academy of Sciences USSR. The first article provides a detailed chronological account of the Laboratory's work from the day of its establishment in 1935 to the present time. The remaining articles discuss general surface force problems, polymer adhesion, surface forces in thin liquid layers, surface phenomena in dispersed systems, and surface forces in aerosols. Names of scientists who have been or are now associated with the Laboratory of Surface Phenomena are listed with references to their past and present associations. Each article is accompanied by references.

TABLE OF CONTENTS:

Zakharayeva, N. N. Twenty-Five Years of the Laboratory of Surface Phenomena of the IFKhan SSSR (Institute of Physical Chemistry of the Academy of Sciences USSR)

Card 2/3

3

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I. GENERAL PROBLEMS OF SURFACE FORCES

Deryagin, B. V. Surface Forces and Their Effect on the Properties of Heterogeneous Systems 11

Kusakov, H. M., and L. I. Nekenitakaya. Investigation of the State of Bound Water in Oil Traps 17

Sachverbakov, L. M. General Theory of Capillary Effects of the Second Order 28

Dukhin, S. S. Surface Forces of a Diffusive Nature Close to Liquid Interfaces 38

II. POLYMER ADHESION

Korotova, H. A., and L. P. Morozova. Investigation of the Adhesive Binding of Polymers by Means of the Luminescence Method 48

Card 3/8

Studies in the Field of Surface Forces (Cont.)	S07/5590	42
Voyutskiy, S. S., V. L. Vilkula, V. Ya. Gul', and Mo Ydn-taul. Effect of Molecular Weight, Polydispersion, and Polarity of High Polymers on Their Adhesion to High Molecular Substrata		55
Matsuk, M. S. Role of Surface Forces in Mica Crystals		66
Shilga, V. P. Double Layer on the Boundary of Solids Characterized by a Donor-Acceptor Bond		76
Krotova, N. A., and L. P. Korosova. Applying Infrared Spectroscopic Methods to Study the Interaction Between an Adhesive and Its Lining (Polymer - Glass)		83
Davyagin, B. V., and I. M. Aloynikova. Measurement of the Width of a Double Electric Layer at the Metal - Dielectric Boundary of Separation		89

Card 4/8

KITAYEV, A.V.; ALEYNIKOVA, I.N.; KOTLYAREVSKAYA, G.G.; PROSHIN, V.A.

Methodology for the measurement of the charge of aerosol particles.
Nov. mod. tekhn. no.3:143-148 '65. (MIRA 19:1)

S/643/61/000/000/005/007
E194/E535

AUTHORS: Deryagin, B.V. and Aleynikova, I.N.

TITLE: On measurement of the true density of electrical double-layer on the boundary of separation between metal and dielectric

SOURCE: Konferentsiya po poverkhnostnym silam. Moscow, 1960. Issledovaniya v oblasti poverkhnostnykh sil; sbornik dokladov na konferentsii. Moscow, Izd-vo AN SSSR, 1961 At head of title: Akademiya nauk SSSR. Institut fizicheskoy khimii, 89-92

TEXT: Calculations based on the electrical theory of adhesion lead to the conclusion that on separating two surfaces with high work of separation a surface charge should be formed on the surfaces with a density of $\sigma = 10^3 - 10^4$ cgs - e.s.u. However, the maximum value of σ measured directly for the system metal-dielectric was 500 cgs-e.s.u. According to the electrical theory of adhesion separation of surfaces is accompanied by discharge which reduces the surface charge density. Discharge can be avoided if the test is made with a thin layer of dielectric. ✓

Card 1/2

On measurement of the true ...

S/643/61/000/000/005/007
E194/E535

Polymer films of known thicknesses were deposited on a cleaned steel sheet which served as one of the electrodes by the method of pouring on the material in solution in volatile solvent. The other side of the film surface was in contact with mercury. The mercury was then poured off the film and σ was measured on separating the coating of electric double layer on the boundary between polymer and mercury. By way of example, relationships are given between σ and the film thickness for the following systems: steel CKH -40 (SKN-40) - mercury; and steel - nitrocellulose - mercury. As the thickness of the dielectric layer is reduced σ increases, slowly at first but later much more quickly reaching a maximum value of 700 cgs-e.s.u. in the system steel - nitrocellulose - mercury with a film thickness of 0.1 μ . At these very small thicknesses the results do not depend on the gas pressures. The tests were made in air and vacuum. There are 4 figures and 7 references: 5 Soviet-bloc and 2 non-Soviet-bloc. ✓

The English-language references read as follows: Ref.3: I.A.Medley. Brit.J.Appl.Phys., 1953, Suppl.No.2, 28; Ref.5: W. Peterson. J.Appl. Phys., 1954, 25, 501, 907.

ASSOCIATION: Institut fizicheskoy khimii AN SSSR (Institute of Physical Chemistry AS USSR)

Card 2/2

ACCESSION NR: AP4037181

8/0069/64/026/003/0394/0395

AUTHOR: Deryagin, B. V.; Toporov, Yu. P.; Aleynikova, I. N.

TITLE: Evaluation of the strength of adhesion of spherical dielectric particles to metal surfaces

SOURCE: Kolloidnyy zhurnal, v. 26, no. 3, 1964, 394-395

TOPIC TAGS: dust removal, 10 micron particle size, adhesive force, ultracentrifuge, glass dust adhesive force, adhesionmeter, centrifugal force

ABSTRACT: The knowledge of such adhesive force is required for thoroughly removing dust from solid bodies. This is particularly important for particles of less than 5-10 microns, since centrifugal force will not completely remove such size. The relative adhesive number (ratio of removed particles to initial adhesive number) is thus a basic adhesion characteristic. Glass-23 spheres and polymer powder, with a particle size less than 5-10 micron, were used as test material, and a UTs-P-A ultracentrifuge as equipment. The measuring equipment and procedure are described. The powder was placed on the rotor. It was shown that no complete dust removal could be obtained at the acceleration maximum of 3×10^5 g for glass, and much lower

Card 1/2

ACCESSION NR: AP4037181

acceleration for the polymer, since the rotor heated up. The adhesive force of the glass thus exceeded $3 \cdot 10^{-3}$ dyne. This method has other disadvantages since it does not permit adhesion measurements under various conditions (humidity, temperature, etc.). Additional vibrators were of no avail. At present tests are conducted for removing dust through acceleration by impact with good preliminary results. A pneumatic adhesionmeter was also devised. Orig. art. has: no figures.

ASSOCIATION: Institut fizicheskoy khimii AN SSSR, Moskva (Institute of Physical Chemistry, Academy of Sciences, SSSR)

SUBMITTED: 03Dec63

DATE ACQ: 09Jun64

ENCL: 00

SUB CODE: GC

NO REF SOV: 001

OTHER: 002

Card 2/2

13208-66 INT(a)/INT(b)/INT(c) INT(d) JE
 ACB NO: AP6901298 SOURCE CODE: UR/0363/65/001/008/1323/1325 30

AUTHOR: Ugal'y, Ya. A.; Ignat'yev, N. A.; Marshakova, T. A.; Aleynikova, K. B. 29

ORG: Voronezh State University (Voronezhskiy gosudarstvennyy universitet) B

TITLE: Preparation of a single crystal of the intermetallic compound Cd_4Sb_3 and its properties 27 27

SOURCE: AN SSSR. Izvestiya. Neorganicheskiye materialy, v. 1, no. 6, 1965, 1323-1325

TOPIC TAGS: cadmium compound, antimony compound, zone melting, single crystal growing

ABSTRACT: In order to select a method for preparing Cd_3Sb_3 single crystals, thermographic and x-ray diffraction studies were carried out to determine the temperature and concentration limits of existence of this compound. Four thermal effects were observed on the heating curves of alloys containing from 25 to 51 wt. % Sb: the first (a small endothermic effect) could not be identified; the second (exothermic) corresponds to the conversion $Cd_4Sb_3 \rightarrow 3CdSb + Cd$; the third (236C) was due to the fusion of the cadmium eutectic; the fourth (438C) was the fusion of $CdSb$. Zone melting was found to be the most suitable method for preparing Cd_4Sb_3 single crystals. Despite the imperfect structure of the crystals obtained, their electric parameters were more interesting than those of polycrystalline samples, because Cd_4Sb_3 single crystals contain an excess of antimony, which causes a higher carrier concentration. The structure of the compound Cd_4Sb_3 was refined; it was found to belong to the trigonal

Card 1/2 UDC 548.48:221:548.55

I 15208.66
ACC NO: APO001898
system, Lane class D_{3d} - 3m. In the hexagonal derivation, the lattice parameters a = 13.04 Å, b = 22.48 Å. Orig. art. has: 2 figures and 1 table.
SUB CODE: 11, 20 / SUBM DATE: 18May65 / ORIG REF: 004 / OTH REF: 003
TS
C-2 2/2

ACCESSION NR: AP4043824

S/0303/64/000/004/0062/0064

AUTHOR: Deryagin, B. V., Toporov, Yu. P., Tomfel'd, I. N., Aleynikova, I. N.,
Parfanovich, B. N.

TITLE: Compressed air adhesion gauge

SOURCE: Lakokrasochny*ye materialy* i ikh primeneniye, no. 4, 1964, 62-64

TOPIC TAGS: organic coating, film adhesion, powder deposit adhesion, organic film
adhesion, compressed air adhesion gauge, adhesion gauge design, adhesion gauge

ABSTRACT: The report describes a compressed air adhesion gauge based on the
principles of the May, Smith and Snow (Nature, 179, 494, 1957) method, designed by the
authors to measure adhesion of organic film and powder deposit coatings to solid surfaces.
The instrument consists of a high-pressure chamber (receiver, 0-150 atm) and a low-
pressure chamber (thick-walled barrel, inside diameter = 22.4 mm), separated by a
suitable membrane. A cylindrical projectile is propelled by compressed air when the
membrane is pierced and impacts on a disk of high-strength heat treated steel. The
resultant inertia produces separation of an organic coating deposited on the projectile face
(target has center aperture with diam. = 15 mm) or a powder coating deposited on the
external surface of the target (solid disk). Described modifications allow tests in air,

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ACCESSION NR: AP4043824

vacuum or any gas medium. Adhesion strength is determined as the minimal velocity of a projectile which results in separation of the coating. Orig. art. has: 2 illustrations.

ASSOCIATION: None

SUBMITTED: 00

ENCL: 00

SUB CODE: IB, MT

NO REF SOV: 005

OTHER: 005

Card

2/2

DERYAGIN, B.V.; TOPOROV, Yu.P.; ALEYNIKOVA, I.N.

Evaluation of the strength of adhesion of spherical dielectric particles to metal surfaces. Koll. zhur. 26 no.3:394-395 My-Je '64 (MIRA 17:9)

1. Institut fizicheskoy khimii AN SSSR, Moskva.

ALEYNIKOVA, L.I., Cand Med Sci -- (diss) "Electroencephalographic
studies of ~~patients with hypertension~~ ^{patients} under ~~combined~~ ^{complex} therapy."

Odessa, 1957. 14 pp (Odessa State Med Inst im N.I. Pirogov).

200 copies.

(RL, 12-58, 101)

-75-

ALBYNIKOVA, L.I.

Electroencephalographic changes in patients with hypertension during
compound therapy and hypnotic sleep. Vrach.delo no.5:459-461 My '57.
(MIRA 10:8)

1. Kafedra propedeutiki vnutrennikh bolezney (zav. - prof. TS.A.
Levina) i kafedra normal'noy fiziologii (zav. - prof. F.N.Serkov)
Gossskogo meditsinskogo instituta
(ELECTROENCEPHALOGRAPHY) (HYPERTENSION)
(SLEEP--THERAPEUTIC USE)

BOYKO, G.F., dotsent ; ALEKSIKOVA, L.I., kand. med. nauk; LEMBERK, Ye.B.

Treatment of coronary atherosclerosis with small doses of
heparin. Ter. arkh. 35 no.4:20-25 Ap'63 (MIRA 17:1)

1. In kafedry gosptal'noy terapii lechebnogo fakul'teta (zav. -
dotsent G.F. Boyko) Odesskogo meditsinskogo instituta imeni
N.I.Pirogova.

ALEYNIKOVA, M. M.

"Fecundity in White Hare as Affected by Helminthic Diseases," Dokl.
AN SSSR, 40, No.3, 1943.

Volga-Kama Sci. Res. Biol. Lab.

1. ALEXIKOVA, M.M.; UTROBINA, N.M.
2. USSR (600)
4. Forest insects - Tatar Republic
7. Some pests of oak in the Tatar A.S.S.R. Len i step' 14 no. 11, 1952

9. Monthly List of Russian Accessions, Library of Congress, February 1953. Unclassified.

~~ALYNIKOVA, M.M.~~; UTOBINA, H.M.

Soil fauna in forest shelterbelts of the Tatar A.S.S.R. Isv. Kazan.
fil. AN SSSR. Ser. biol. nauk no.4:69-113 '53. (MIRA 10:6)
(Tatar A.S.S.R.--Soil fauna)
(Windbreaks, Shelterbelts, etc.)

ALEYNIKOVA, M.M.

Pathology of organs of the varying here in cases of helminthic diseases.
Trudy VNIIO no.13:207-213 '53. (MIRA 7:5)
(Hares--Diseases) (Worms, Intestinal and parasitic)

ALYNIKOVA, M.M.

Development of insect fauna and pest control in the shelterbelts of
the Tatar A.S.S.R. Uch.zap. Kas.un. 113 no.1:133-149 '53.

(MIRA 10:3)

(Tatar A.S.S.R.--Forest insects)

ALBYNIKOVA, H.M.

Oak leaf pests in the Tatar A.S.S.R. Uch.sop.Kaz.un. 115 no.8:167-
186 '55. (MLRA 10:3)

1. Deystvitel'nyy chlen Obshchestva yestestvoispytateley.
(Tatar A.S.S.R.--Oak--Diseases and pests)